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10/598,183	11/27/2006	Takakazu Shiomi	P30534	1989
52123 7590 05/12/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER LAY, MICHELLE K				
ART UNIT		PAPER NUMBER		
2628				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

## Application No.

10/598,183

## Applicant(s)

SHIOMI ET AL.

## Examiner

MICHELLE K. LAY

## Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5506)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment to the claims, drawings, and specification filed 08/21/2006 has been entered and made of record. Claims 1-19 are pending.

### ***Specification***

The abstract of the disclosure is objected to because the abstract contains reference characters. Correction is required. See MPEP § 608.01(b).

### ***Information Disclosure Statement***

The information disclosure statement(s) (IDS) submitted on 11/27/2006 and 12/31/2008 is being considered by the examiner.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 13 recites a program, however fails to recite a computer readable media embodied/encoded with computer executable instructions. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not capable of causing functional change in the computer. Warmerdam, 33 F.3d at 1361, 31 USPQ 2<sup>nd</sup> at 1760. Such claimed data

structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention that permit the data structure's functionality to be realized.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims **1-6** and **12-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano (2002/0047917 A1) in view of Komagata (2003/0193512 A1).

Hirano teaches the limitations of claims 1-6 and 12-19 with the exception of disclosing a plurality of image layers. However Komagata teaches a system that combines a plurality of image layers [abstract].

In regards to claim **1**, Hirano teaches an image processing method/system that generates a layer image signal and a display signal for each layer when displaying signals in different formats simultaneously on a single screen [0027]. The system comprise a layer generating and media superimposing unit (3) generates an OSD layer (4) from the menu data (D1) supplied from the digital processing unit (1), a character layer (4), still image layer (6) and a moving image layer (7) [0031]. The system of

Hirano downloads a broadcast signal containing the image data (said **downloaded program**) [0028]. The layer generating generates a display section signal (S4) for each of the layers [0032].

Komagata teaches a system that combines a plurality of image layers. With reference to Fig. 1, memory (1) has a plurality of predetermined storage areas each containing one layer of image data (said **plurality image storage units**) [0038]. The combination order controller (3) controls the order of layers to be combined by the combiner circuit (4) (said **first order storage**) [0038]. The combination order controller (3) determines which image combiner each source should go, according to a given control word (said **notification**) [0039]. With data specified in the control word register, the combination order controller (3) directs the specified image layer to their specified image combiner (said **program execution**) [0040, 0045]. The combiner circuit (4) (said **superimpose**) contains a plurality of image combiners that when combined, produces a single superimposed image that is displayed on monitor unit (107) [0038, 0045, 0084].

It would have been obvious to one of ordinary skill in the art to extend the image layer of Hirano to include a plurality of image layers because with layered graphics, one can modify a particular graphical element in a picture by replacing the corresponding layer with another one. A new element can be added to an existing picture by inserting a new layer, therefore making it easier to modify a picture rather than having to re-generate an entirely new image [Komagata: 0005].

In regards to claim 2, the combination order controller (3) of Komagata controls the order of layers to be combined by the combiner circuit (4) (said **first order storage**) [0038]. The combination order controller (3) determines which image combiner each source should go, according to a given control word (said **notification**) [0039]. With data specified in the control word register, the combination order controller (3) directs the specified image layer to their specified image combiner [0040, 0045]. The combiner circuit (4) (said **superimpose**) contains a plurality of image combiners that when combined, produces a single superimposed image that is displayed on monitor unit (107) [0038, 0045, 0084].

In regards to claim 3, the combination order controller (3) of Komagata determines which image combiner each source should go, according to a given control word (i.e., based on display order) [0039].

In regards to claim 4, Komagata teaches combination order controller (3) to rearrange the order of source images provided by the reading circuit (2) (said **changing unit**). When the order of image combination has to be changed, it can be done by simply writing a new value to the control word register in the combination order controller (3) (said **notification**) [0042-0043].

In regards to claim 5, Komagata teaches via an example, changing the order from DCBA to CDAB. According to the new order, the combination order controller (3)

directs the images to their new combiner, thus obtaining the new picture composed of four source images stacking in the order CDAB (said ***change each graphic***) [0042].

In regards to claim **6**, Komagata teaches via an example, changing the order from DCBA to CDAB. From the example, D and C interchanged positions, and B and A interchanged positions.

In regards to claim **12**, claim 12 recites similar limitations as claim 1 but in method form. Therefore, the same rationale used for claim 1 is applied. It would have been obvious to one of ordinary skill in the art that the system of Hirano in view Komagata described in the rationale of claim 1 implements a process.

In regards to claim **13**, claim 13 recites similar limitations as claim 1 but in manufacture form. Therefore, the same rationale used for claim 1 is applied. Furthermore, Komagata teaches the host CPU (100) performs various operations according to programs stored in the ROM (101) or RAM (102) [0045].

In regards to claim **14**, Komagata teaches combination order controller (3) to rearrange the order of source images provided by the reading circuit (2) (said ***changing unit***). When the order of image combination has to be changed, it can be done by simply writing a new value to the control word register in the combination order controller (3) [0042-0043]. Furthermore, Komagata teaches via an example, changing the order from

DCBA to CDAB. According to the new order, the combination order controller (3) directs the images to their new combiner, thus obtaining the new picture composed of four source images stacking in the order CDAB [0042]. Therefore, the position of the image layers changes based on the new control word value, and thus, the position of the layers is re-rendered as changes occur over time.

In regards to claims **15-19**, claims 15-19 recites similar limitations as claims 2-6 respectively. Therefore, the same rationale used for claims 2-6 is applied.

2. Claims **7-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirano (2002/0047917) in view of Komagata (2003/0193512 A1) as applied to claim 1, and in further view of Johnson et al. (6,961,061).

Hirano in view Komagata teaches the limitations of claims 7-11 with the exception of explicitly teaching a plurality of video images. However, Johnson teaches overlaying multiple video layers to produce a superimposed presentation.

In regards to claim **7**, Johnson teaches a production system (10) that store a video presentation in memory, e.g., database (24) [c.6 L. 63-68]. Johnson further teaches graphics/video database (17) may be implemented in a plurality of separate memory devices (said **plurality of video storage units**) [c.5 L. 45-46]. With reference to Fig. 3, the system of Johnson generates multiple video segments which are combined (said **superimpose**) in a layering concept to generate the video presentation [c.7 L.60-65].



The various video layers may be saved in the graphics/video database (17) accessible by the system processor (12) [c.10 L.13-17]. Although Johnson is silent to a **second order**, it would have been obvious to one of ordinary skill in the art that an order must be determined amongst the plurality of video layers because certain layers are required to be displayed within a certain order, such as the background (72) layer needs to be the lowest within the stack, and the foreground (74) towards the top. Additionally, based on the selected layers, such as precipitation layer (46) and cloud layer (38), precipitation layer (46) would be required to be above cloud layer (38) [c.14 L.37-47]. Therefore, a second order is determined. Furthermore, based on the order, video segments forming each layer of the video presentation are selected from the graphics/video database (17) (said **notification unit to execute second order**), generated, and outputted on display (13) (said **display unit**) [c.15 L.15-20]. Furthermore, conventional memory associated with the system processor (12) may be used to store the programming instructions which control operation of the processor (12), such as the programming instructions for implementing a method for generating the video presentation (said **program execution**) [c.5 L. 33-37].

It would have been obvious to one of ordinary skill in the art to modify the system of Hirano to further include multiple layers of video graphics because for the same reason of multiple image layers, with layered graphics, one can modify a particular graphical element in a picture by replacing the corresponding layer with another one. A new element can be added to an existing picture by inserting a new layer, therefore

making it easier to modify a picture rather than having to re-generate an entirely new image [Komagata: 0005].

In regards to claim **8**, Johnson teaches the video segment layer (42) may be generated from video segments or **still photographs** [c.8 L.56-60]. Therefore the rationale of claim 7 is applied in regards to still photographs.

In regards to claim **9**, claim 9 recites similar limitations as claims 1, 7, and 8. Therefore, the same rationale used for claims 1, 7, and 8 is applied.

In regards to claim **10**, claim 10 recites similar limitations as claim 4. Therefore, the same rationale used for claim 4 is applied.

In regards to claim **11**, Komagata teaches combination order controller (3) to rearrange the order of source images provided by the reading circuit (2) (said **changing unit**).

When the order of image combination has to be changed, it can be done by simply writing a new value to the control word register in the combination order controller (3) [0042-0043]. Furthermore, Komagata teaches via an example, changing the order from DCBA to CDAB. According to the new order, the combination order controller (3) directs the images to their new combiner, thus obtaining the new picture composed of four source images stacking in the order CDAB [0042]. Therefore, the position of the

image layers changes based on the new control word value, and thus, the position of the layers is re-rendered as changes occur over time.

Johnson further teaches graphics can be overlaid on the video segments [c.7 L.39-41].

Therefore, it would have been obvious to further extend the combination order controller of Komagata to the system of Hirano to control the order of the video, still and image layers as modified by Komagata and Johnson. Furthermore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the combined invention of Hirano to display the graphics in between at least one of video image or still image based on the user's preference. Applicant has not disclosed that displaying the graphics in between at least one of video image or still image provides an advantage, is used for a particular purpose, or solves a stated problem. Furthermore, one of ordinary skill in the art, would have expected Applicant's invention to perform equally well with the teaching of Johnson overlaying graphics on the video segments because the order of display is ideally based on the user's preference and the information that is to be portrayed. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combined invention of Hirano, Komagata and Johnson to obtain the invention as specified in claim 11.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsumoto et al. (2003/0080958 A1)

Takishita et al. (5,900,859)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELLE K. LAY whose telephone number is (571)272-7661. The examiner can normally be reached on Monday-Friday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee M. Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle K. Lay/  
Examiner, Art Unit 2628  
May 7, 2009